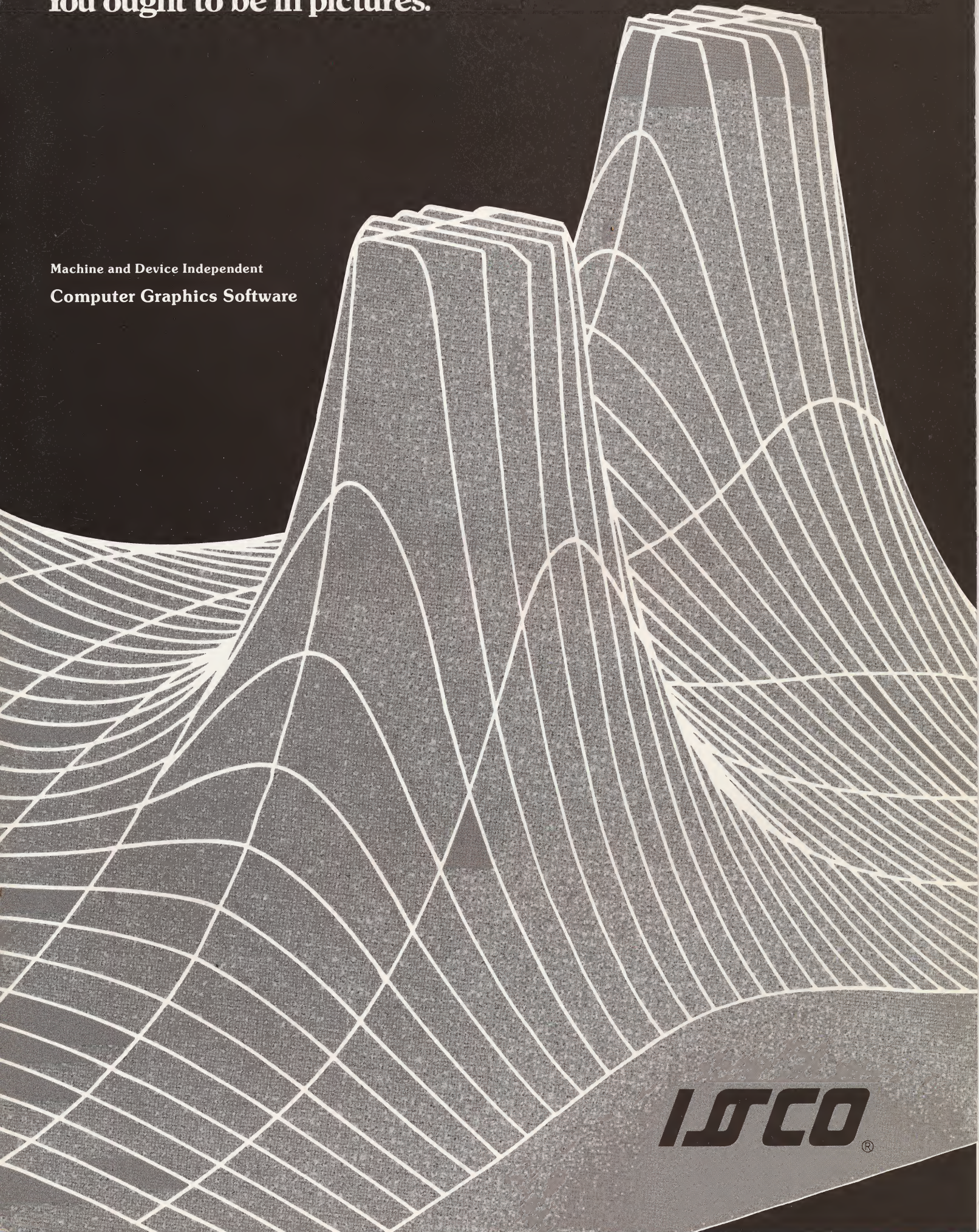


You ought to be in pictures.

Machine and Device Independent
Computer Graphics Software



ISCO®

The data's in your computer, but what do you get out of it?

You can readily gather and process information with the help of experts and sophisticated equipment. But what about presentation? Computer print-outs can be unwieldy as a form for presenting information. What is the best method for interpreting the data you get out of your computer?

Graphics Do It Better, Not To Mention Faster and Cheaper.

Graphical representation effectively communicates information. A picture saves time by clarifying obscure data and increasing comprehension. Here's an example of how graphics succeed by simplification.

You Get The Total Picture, Not Just A Bunch Of Numbers.

Confronted with a table of numbers, even such a short list as that in Figure 1, it is hard to get a feel for what the data really says, and the reader may draw hasty and possibly misleading conclusions. The graphic representation in Figure 2 shows the total picture, clearly and simply. With a graph you get:

- More useful information with less confusing detail.
- Increased retention through visualization.
- More impact and better communication.

You Name The Game, The Data Stays The Same.

The same basic data from your computer can tell many different stories, depending upon how it is presented. The message you wish to convey, or the impression you need to create, determines the type of graph to use.



No Matter What The Input, The Output Comes Out Your Way.

For example, say the Glide Slide Rule Company has gathered statistics on the sales volume of their product, Glide. The computer's print-outs are rejected as a method of presenting this information . . . too much unreadable detail. Graphic presentation is called for, and the difference in point of view is obvious.

GLIDE RULE SALES (000s)												
	GLIDE			A			B			C		
	TOTAL	DOLLARS	PCT.	DOLLARS	PCT.	DOLLARS	PCT.	DOLLARS	PCT.	DOLLARS	PCT.	
0101	908	48	5	370	10	171	19	309	32	290	32	
02	830	25	6	383	43	160	17	290	33	280	33	
03	905	57	5	400	44	183	20	263	29	263	29	
0401	893	37	7	370	41	192	21	276	31	276	31	
02	970	52	6	372	41	203	22	272	30	272	30	
03	928	28	9	367	39	272	24	275	30	275	30	
04	928	61	7	380	41	233	25	240	26	240	26	
0501	940	61	7	373	40	236	25	268	29	268	29	
02	983	23	6	297	31	264	28	229	25	229	25	
03	893	36	6	301	32	238	25	340	36	340	36	
04	928	61	7	329	36	200	22	336	36	336	36	
0501	923	71	8	333	36	238	25	356	37	356	37	
02	918	68	8	324	35	238	25	338	35	338	35	
03	915	48	7	317	35	238	25	338	35	338	35	
04	930	87	6	329	35	204	22	337	36	337	36	
0501	920	86	7	327	36	206	22	339	36	339	36	
02	960	70	7	335	36	218	23	337	36	337	36	
03	965	100	10	364	38	238	25	277	29	277	29	
04	945	127	14	340	36	213	22	260	28	260	28	
0501	970	126	13	323	34	237	26	262	27	262	27	
02	933	220	24	344	34	160	17	291	31	291	31	
03	940	253	27	290	31	172	18	223	24	223	24	
04	930	334	35	294	32	148	16	214	23	214	23	
0501	960	247	25	280	29	213	22	310	33	310	33	
02	933	342	36	281	29	143	15	207	22	207	22	
03	965	281	29	270	28	183	19	246	26	246	26	
04	950	348	37	257	27	186	19	200	21	200	21	
0501	940	344	37	240	25	190	19	311	33	311	33	
02	929	401	43	227	24	65	7	168	17	168	17	
03	885	483	55	182	21	80	9	140	15	140	15	
04	840	594	63	123	13	73	8	188	20	188	20	
0501	830	611	62	120	12	47	5	102	10	102	10	
02	840	578	69	130	13	25	3	89	9	89	9	
03	820	583	71	127	13	12	1	76	8	76	8	
04	778	653	85	80	9	4	0	48	5	48	5	
0501	768	681	84	75	8	1	0	49	5	49	5	
02	760	627	82	86	9	1	0	61	6	61	6	
03	710	610	85	68	7	1	0	38	4	38	4	

Fig. 1

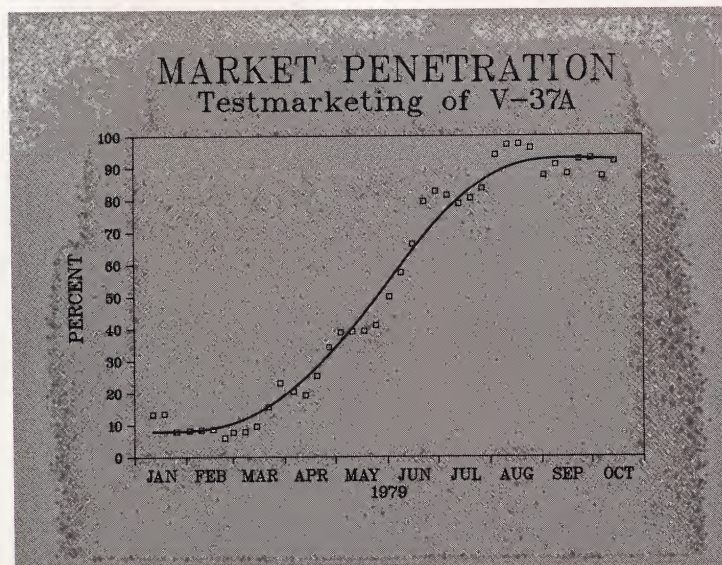
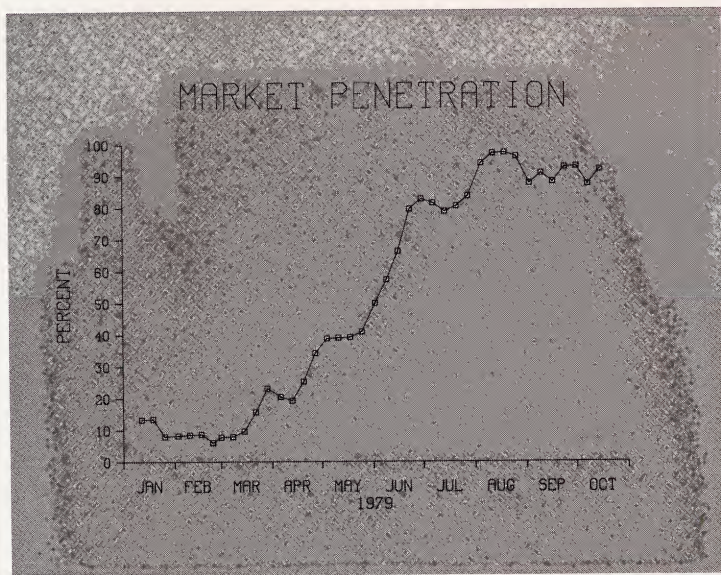
DISSPLA®

A PROPRIETARY SOFTWARE PRODUCT OF ISSCO

Computer Graphics From Simple To Sophisticated.

DISSPLA is the most sophisticated graphics software system available. Superior features will help you win the numbers game. And best of all, it's easy to use. There are unlimited plotting capabilities without the need for complicated programming. You select the degree of sophistication you want.

These three graphs illustrate how DISSPLA progresses to complexity *simply*.

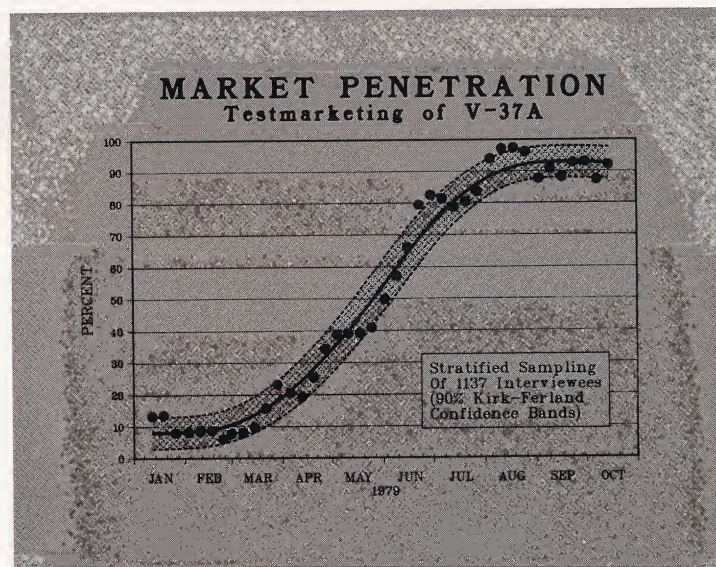


Publication Quality Pictures Are Easy To Achieve.

The total flexibility of DISSPLA provides the tools for building the picture you need. DISSPLA calls on an integrated library of over 350 FORTRAN subroutines for many uses: business charts, management charts, engineering graphs, data analysis, scientific calculations, reports, maps, slides, and movies. Camera-ready publication originals may be produced without involving the art department.

Designed For Computer Programmers Without Graphics Training.

With DISSPLA you have a powerful system called from your own application program. DISSPLA has a simple and logical design, clearly described in the comprehensive manual and the pocket reference. Without being a graphics expert, you can produce good plots in just a few hours. Simple instructions make plotting as easy as printing.



Data Represent

DISSPLA is Machine Independent ...

DISSPLA is now working on: IBM 360/370 (and lookalikes); CDC 6000, 7000 and Cyber 70/170 series; UNIVAC 1100 series; DEC 10, 20 and VAX 11/780; Honeywell 6000 series; Burroughs 6700; Harris 140; and HP 3000.

AND Device Independent ...

DISSPLA interfaces readily with any plotting device. It is currently being used with: Applicon, Broomall, CalComp, Chromatics, Computek, DatagraphiX, Dicomed, III, Gerber, Gould, Hewlett-Packard, Houston Instrument, Ramtek, Singer, Tektronix, 3M, Varian, Vector General, Versatec, Xynetics & Zeta. Or if you have straight line plotting capabilities, then DISSPLA is perfect for you.

Speed, Innovation, And Quality To Match Your Input.

The process is fast as well as easy. You receive clear error messages when a mistake is made . . . your program doesn't stop. The end result is graphics of such quality that no art department touch-up is necessary. DISSPLA allows presentation methods to match the sophistication of advanced analysis techniques.

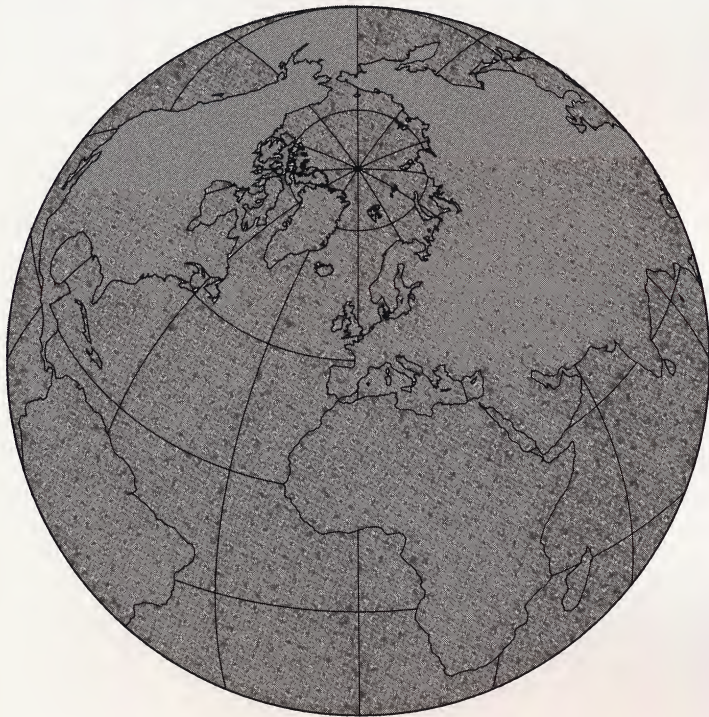
Besides The Programming Language, What's The Difference Between DISSPLA And TELLAGRAF?

In addition to TELLAGRAF capabilities, DISSPLA puts even more sophisticated picture building tools at your disposal: 3-D projection of any plot, with or without hidden lines; maps for world coastlines with 16 projections, land or ocean blanking; full user interaction.



It can be said, without hesitation, that DISSPLA is truly a unique software system. No other graphic software package can provide its wide variety of features, versatility, perfection in detail, ease of use, and simply comprehended documentation. Independent studies have proven DISSPLA graphics to be far superior to any competitive graphics software system. Check with current users and compare for yourself.

tation Graphics



If You're Not A Computer Expert, The Best Show In Town Is TELLAGRAF.

The TELLAGRAF software system allows access to computer graphics for the businessman, administrator, or analyst—without programming—or *for the computer professional who is in a hurry*. With a graphics terminal right at your desk, you can create publication quality charts and graphs to suit your specific needs. There is no need to explain your requirements to a computer or graphics expert, who doesn't understand your problem.

The Plot Unfolds In Simple English.

TELLAGRAF is a flexible, conversational computer graphics system. It translates complicated statistical reports into simplified charts. And this is all accomplished with plain English commands.

It's A Quick Study Script.

Bar, column, line, surface, and pie charts speed the decision making process by their generation in minutes or hours rather than days or weeks. Many standard graphic features are built in. You no longer have to depend on a programmer or the art department to get the information you need. And this immediacy means your data will be current!

Here's an example of what you can do with simple English commands: scaling, layout and annotations are all done automatically.

```
DATA FILE
GENERATE A BAR CHART
THE TITLE IS "BREAD 'N BUTTER"
"R(ETAIL) P(RICES IN) U.S. C(ITIES)"
"1910 TO 1978"
LABEL THE Y AXIS "COST IN DOLLARS" IN LOWER CASE
ADD A DASHED GRID ON THE Y AXIS
ON THE X AXIS PUT 2 TICK MARKS PER YEAR
FRAME THE PLOT
INPUT DATA
"BREAD"
1910 .07 1920 .12 1930 .09 1940 .08 1950 .14 1960 .20 1970
24 1978 .57
"BUTTER"
1910 .36 1920 .70 1930 .46 1940 .36 1950 .73 1960 .75
1970 .87 1978 1.54
END OF DATA
GO
```

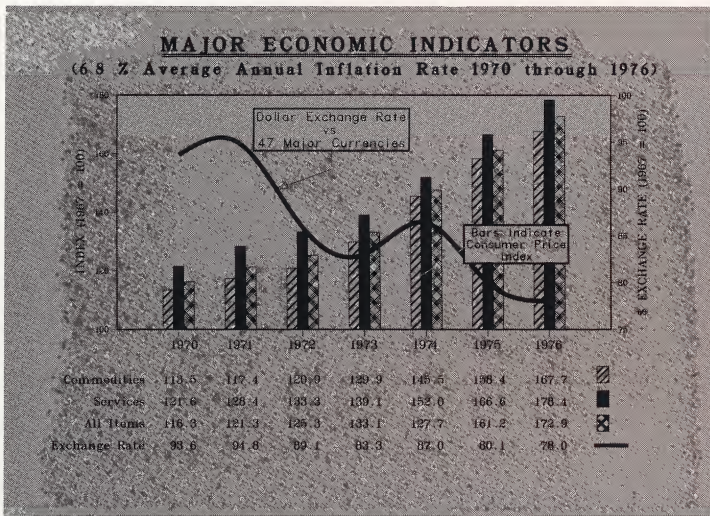
You Choose The Form Your Story Should Take.

Whatever your statistical needs, TELLAGRAF makes for easy numbers. Call on TELLAGRAF for business charts, engineering graphs, data analysis, scientific calculations, reports; brochures and slides, too!

TELLAGRAF®

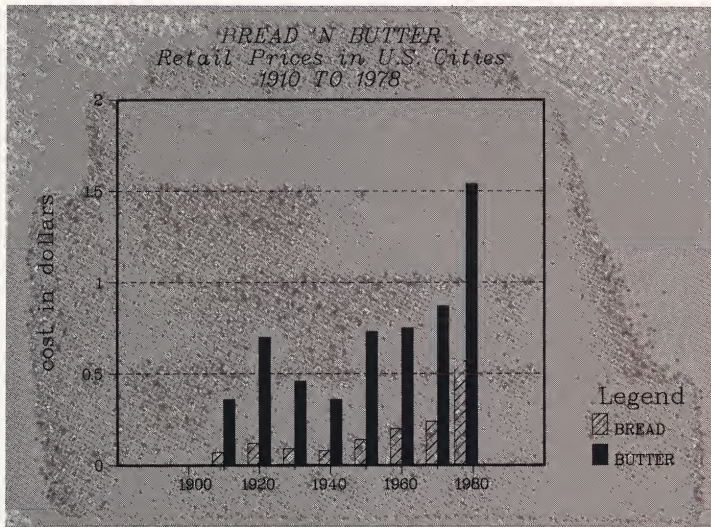
A PROPRIETARY SOFTWARE PRODUCT OF ISSCO

Computer Graphics Everyone Can Produce



How TELLAGRAF Builds The Plot.

The tools are all there to build the graph you need: axis systems, grids on any axis, shading, choice of lettering, curves.

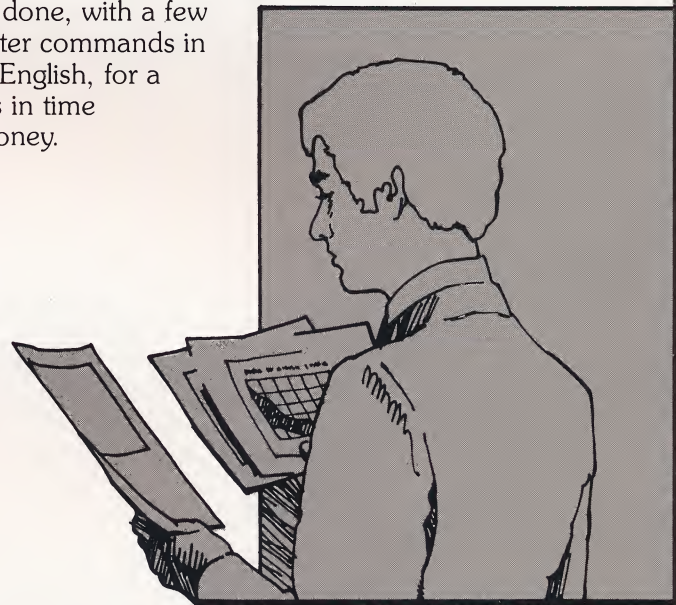


With A Good Director, Even Complexity Is Simple.

The Users Guide and Reference Manual for TELLAGRAF are written for those with little or no computer experience. They start with simple graphs and lead the user step-by-step to the full power of state-of-the-art computer graphics.

Adapt The Story To Your Needs.

Designed for the non-computer and non-graphics expert, TELLAGRAF allows the flexibility for experimentation. You can try different graphs or combinations to find the best one for your needs. Your trial and error selection is simply done, with a few computer commands in simple English, for a savings in time and money.



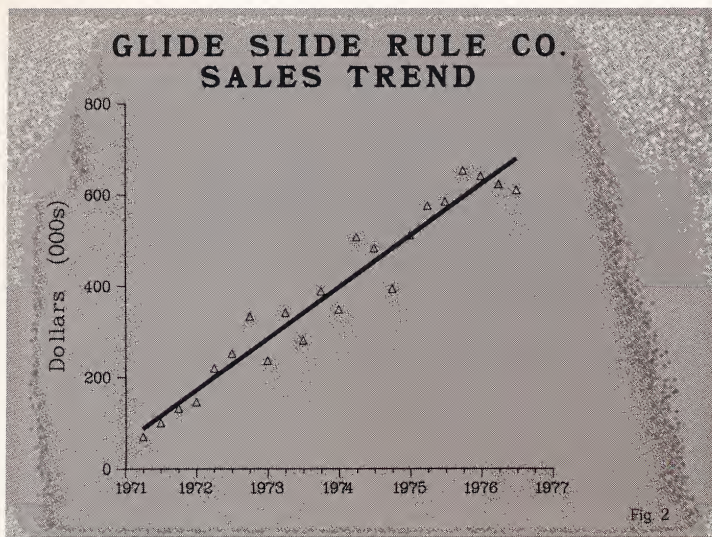
If You Forget Your Lines, We'll Remind You.

TELLAGRAF talks back intelligibly in case of error. If you haven't supplied the proper information, the program will tell you what to do about it without starting back at the beginning.

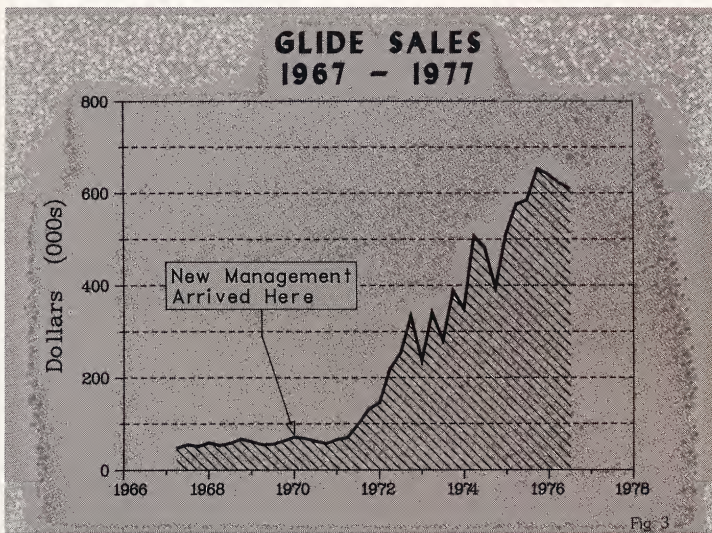
Instead Of A Cast Of Thousands . . .

You, the computer, and a TELLAGRAF Software System. That's all it takes (plus a little training), to have quality charts and graphs for any aspect of your business. Train your secretary, or any member of your staff in its use . . . that's how simple it is.

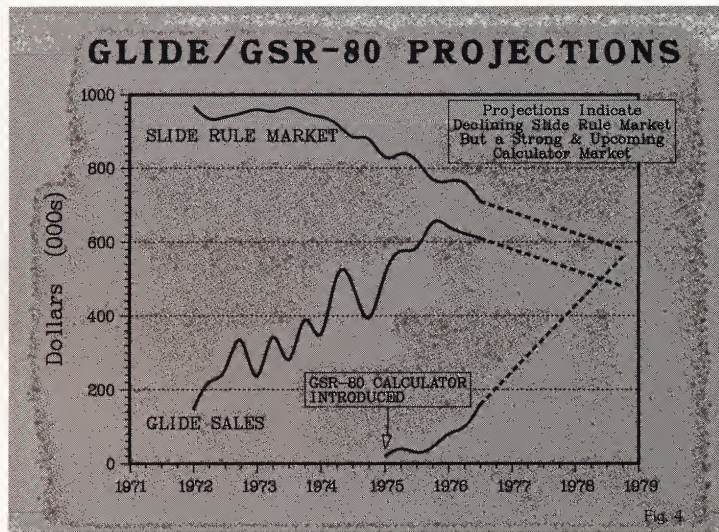
TELLAGRAF operates on virtual IBM and DEC computers. (Ask us about others we're working on.) Like DISSPLA, it operates any graphics device . . . CRT, pen and electrostatic plotter, microfilm recorder.



The Sales Department plots a trend line of market coverage. Its upward movement implies continued growth.



The President of Glide chooses a format that indicates superior performance over the competition during his tenure. The information is backdated further than the Sales Department's graph to emphasize improved growth in Glide sales.



The manager of New Product Development charts his data from the introduction of the first electronic calculator in 1972. He presents the picture of a dwindling slide rule market and that Glide's entry into the calculator market insures the company's continued growth.

Each of the three graphs is an honest interpretation of the original computer print-out. The difference is in selection and emphasis. This can be achieved with simple methods.

Here's Where The Faster And Cheaper Comes In.

Choosing the best graph for any given situation requires experimentation. Doing that manually can be prohibitively time consuming and expensive. The proper tools allow experimentation, with ease, speed and economy.

About Our Growing Company And Unique Software Products.

Development of the DISSPLA graphics system began in the mid-sixties and in 1970, ISSCO was organized to market DISSPLA and to pursue development projects in the computer graphics field.

The DISSPLA of the early seventies was able to convert data into charts and graphs automatically and in a fraction of the time it would have taken an art department or programmer to complete. The company continued to enhance the product and by 1974, DISSPLA provided publication-quality output, high quality text and characters, and custom flexibility. Recently, ISSCO advanced the state of computer graphics even more with the introduction of TELLAGRAF late in 1977.

Over the past 10 years, as computer graphics has risen from novelty status to that of a necessary tool, ISSCO has experienced dynamic growth and its products are marketed internationally. The company projects continued strong growth, even exceeding that forecasted for the graphics equipment, services, and software markets. ISSCO, a recognized leader in computer graphics, intends to maintain that position by continuing to enhance its products and pursuing new areas of development.

ISSCO[®]

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Integrated Software Systems Corporation

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